

These devices were the same ones used by the monks with the exception of two sparrow traps, which were purchased new, yet were the same style as the others previously used. Our decision to purchase two additional traps was based on brief historical field notes, which recorded the use of 13 traps (unknown, unpublished).

Traps were set up from 0800 to 1500 every day, excluding weekends, holidays, and stormy weather. Trap locations were scattered to ensure equal attraction of forest, edge, and open space species. The sites chosen for the Brenkle water traps included one being placed within the forest west of the cemetery, two on the forest edge, and three in the open cemetery. The sparrow traps were set out on trimmed grass within the cemetery with three in the open and four under coniferous trees.

After initial set-up in the morning, we checked the traps every 30 minutes to prevent injury to captured birds. Once a bird was caught, it was removed, identified for species and gender (when possible), then banded (standard USGS Bird Banding Laboratory aluminum leg bands) and released.

We conducted several analyses with the data collected in 1998 and data from preceding years (1931-1969, with gaps). The gaps represent years in which we did not include any data for one of two reasons. First, there was simply no bird capturing done for the time period we examined (10 June to 7 August), or the data during this time frame were collected for less than 15 days. These short periods were excluded due to the likelihood of small sample sizes and thus misleading data.

We began our analysis by compiling the data into a summary table (Table 1). The data were grouped by year to include: number of days trapped, number of species caught, and total number of birds captured. This analysis aided in identifying trends or changes to those numbers. Second, we graphed the mean number of birds caught per day versus the year (Fig. 1), and the mean number of species caught per day versus year (Fig. 2). We realized a consistent number of trapping days did not exist from year to year. By averaging total birds and number of species caught by number of days trapped, we were able to establish some standardization of effort. We also applied a best-fit line to both graphs to emphasize apparent trends. Third, we quantified the number of birds by year and species. This allowed us to track the occurrence and numbers of each species over time.

We included a more detailed examination of the historical and current frequency of 1998's top four most abundant species (Fig. 3): American Robin (*Turdus migratorius*), Black-capped Chickadee (*Poecile atricapillus*), Chipping Sparrow (*Spizella passerina*), and House Sparrow (*Passer domesticus*) from an external source (Sauer et al., 1997). Lastly, an analysis of evenness was conducted using the Simpson's Index (D). The

higher the D index the greater the heterogeneity and evenness of the community (Khrone, 1998). Figure 4 indicates the differences and similarities among D index values for each year.

## Results

*Summary table:* We had 111 capture events (89 different individuals of 14 different species) in 1998. The greatest number of species ever caught in one year during the time period we examined was 20 in 1934 (Table 1). That same year also boasted the second highest number of trapping days and total number of individuals caught. The least number of species ever caught over the course of our time frame was eight, which occurred in 1967, the year that also had the least number of trapping days and the smallest number of total individuals caught. In 1959, the most birds (286) were trapped in the analyzed time frame (10 June to 7 August). In 1998, we trapped for 27 days, the same number of days trapped in 1961; however, we caught

Year	Number of species caught	Number of days trapped	Total number of individuals caught
1931	12	42	153
1932	10	43	271
1933	18	56	202
1934	20	50	281
1935	14	40	135
1936	19	42	169
1937	13	40	176
1938	12	37	143
1939	13	33	118
1940	13	33	213
1942	11	35	159
1946	11	31	171
1947	10	24	125
1948	10	25	112
1949	11	28	162
1950	12	29	116
1958	15	32	201
1959	17	37	286
1960	11	33	252
1961	12	27	154
1962	13	31	180
1963	16	35	208
1964	14	35	198
1966	14	31	113
1967	8	21	59
1968	14	34	174
1998	14	27	89
Mean	13.2	34.5	171.1

**Table 1.** Summary table of all years evaluated with reference to number of species, days trapped and total individuals.